

3. (Amended) The peptide of claim 2, chosen from the group consisting of:

- a peptide comprising the following sequence (Ia):

HSFACTSYWCGKFCGTASCTHYLCRVLHPGKMCACVHCSR (Ia) (SEQ ID NO: 6)

- a peptide comprising the following sequence (Ib):

HPHVCTSYYCSKFCGTAGCTRYGCRNLHRGKLCFCLHCSR (Ib) (SEQ ID NO: 7).

4. (Amended) A nucleic acid comprising a sequence encoding the peptide as claimed in claim 1.

Please cancel claims 5, 9 and 10.

Please add the following new claims 11 – 18.

11. A nucleic acid comprising a sequence which encodes a peptide as claimed in claim 2.

12. A nucleic acid comprising a sequence which encodes a peptide as claimed in claim 3.

13. A method of detecting a nucleic acid as claimed in claim 4 comprising screening a nucleic acid library with a fragment of more than 15 base pairs of the coding region of either SEQ ID NO:1 or SEQ ID NO: 3.

14. A prokaryotic or eukaryotic cell transformed with a nucleic acid sequence as claimed in claim 11.

15. A method of producing a myticin antimicrobial peptide which has a molecular mass of approximately 4.5 kDa, a pI of approximately 8.7 and containing 8 cysteine residues, comprising culturing the transformed cell of claim 8 under conditions effective for the expression of the nucleic acid which encodes the myticin peptide.

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16. A method of producing a myticin antimicrobial peptide which has a molecular mass of approximately 4.5 kDa, a pI of approximately 8.7 and containing 8 cysteine residues, comprising culturing the transformed cell of claim 14 under conditions effective for the expression of the nucleic acid which encodes the myticin peptide.

17. A method of treating a bacterial, fungal or parasitic infection in a patient or animal comprising administration of an amount of the myticin antimicrobial peptide of claim 1 effective to inhibit further growth of the infectious organism.

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18. A method of treating a bacterial, fungal or parasitic infection in a patient or animal comprising administration of an amount of the myticin antimicrobial peptide of claim 2 effective to inhibit further growth of the infectious organism.
